
Goal: ENVIRONMENTAL PROTECTION AND ENHANCEMENT

Desired Community Condition(s)

Solid wastes are produced no faster than natural systems and technology can process them.

Air, land and water systems protect health and safety.

Program Strategy:SOLID WASTE DISPOSAL

54502

To safely and efficiently dispose of solid waste at city landfill and convenience centers.

Department: SOLID WASTE

Service Activities

Landfill

Old Landfill Remediation

Convenience Centers

Strategy Purpose and Description

The purpose of this program strategy is to safely and efficiently operate the Cerro Colorado Landfill and the City's three Convenience Centers. The Solid Waste Management Department will continue environmental monitoring of the existing landfill and closed landfills. Landfill and Convenience Centers provide the citizens of Albuquerque facilities to dispose of their solid waste.

The three convenience centers are Montessa Park located at 3512 Los Picaros Rd S.E., Don Reservoir located at 114th ST S.W. and Eagle Rock located at 6301 Eagle Rock Rd. N.E.. Staff is trained in new operational techniques and Environmental Regulations and Requirements.

Changes and Key Initiatives

Continue operational techniques that utilize air space in the landfill more efficiently. Regulations require the design of a gas collection system at the Cerro Colorado landfill

The Department has emphasized the screening of loads entering all Solid Waste Facilities. To accomplish this goal the "Waste Screening Certification Training Program" given by the State of New Mexico, Environmental Department, (which has over site over all Landfill Facilities), was offered to more Solid Waste Employees, from the cashier at convenience centers to landfill attendants.

This has increased the awareness of unauthorized waste loads and the number of training hours for employees. Random written load inspections for unacceptable wastes are conducted by senior management, as required by the state, that may spot the more hazardous materials entering the Solid Waste facilities.

Implementing a gas collection system for the Cerro Colorado Landfill.

The Solid Waste Management Department, Disposal/Processing staff will continue researching & using the best Landfill operational techniques to utilize airspace efficiently.

Design and Construction of a gas collection system at the Cerro Colorado is being completed thru job tasks with assigned time lines.

Waste Screening of loads entering all Solid Waste facilities continues, and procedures are in place to handle different situations when unacceptable waste loads are spotted within the facilities.

A total of 5,515,221 tons of waste has been deposited into Cerro Colorado Landfill from May 15, 1990 (opening date) thru Sept 2002. This is equivalent to approximately 11,278,075 cubic yards of airspace. Daily and intermediate soil cover represents approximately 25% 2,819,518 cubic yards of airspace used. With a total of 81,392,000 cubic yards (Cells 1-18). The 11,278,075 cubic yards utilized thru Sept 2002 represents 13.86% of airspace used.

New Initiatives FY04

1. Implementing a Landfill Gas Collection System for the Cerro Colorado Landfill.
2. Start the process for final Cell #7 design.

Extend the days of operation at each of the three convenience centers to seven days a week.

Priority Objectives

Fiscal Year

Priority Objectives

2005 OBJECTIVE 2. Continue to characterize the extent that landfill gas has migrated outside of the boundaries of former City owned and/or operated landfills. Develop and initiate plans to address public health and safety risks from migrating landfill gases and report on progress to the Mayor and Council by the end of FY/05.

Input Measure (\$000's)

2001	651	651 REFUSE DISPOSAL OPERATING FUND	4,631
2002	651	651 REFUSE DISPOSAL OPERATING FUND	4,631
2003	651	651 REFUSE DISPOSAL OPERATING FUND	4,406
2004	651	651 REFUSE DISPOSAL OPERATING FUND	4,118
2005	651	651 REFUSE DISPOSAL OPERATING FUND	4,581

Strategy Outcome	Measure	Year	Project	Mid Year	Actual	Notes
Wastes are appropriately disposed of	% of Unacceptable waste loads (unacceptable loads waste screens) LANDFILL	2001			1.5% 5/200	
		2002	1.0% 4/210		1.0% 4/210	
		2003	1.0% 4/210		0.6% 2/314	
		2004	1.0% 4/210	0	0% 0/496	
		2005	0.6% 2/314			

Strategy Outcome	Measure	Year	Project	Mid Year	Actual	Notes
Wastes are appropriately disposed of	% of Unacceptable waste loads (unacceptable loads waste screens) CONVENIENCE CENTERS	2001			2.0% 5/120	
		2002	1.5%/4/125		1.5%/4/125	

2003	3/240		0.1% 3/2718
2004	1.5%/4/125	1%/ 9/1498	.004% 12/2871
2005	1.0%/33/32 58		

<i>Strategy Outcome</i>	<i>Measure</i>	<i>Year</i>	<i>Project</i>	<i>Mid Year</i>	<i>Actual</i>	<i>Notes</i>
Total tonnage	Measure the tonnage coming into landfill	2001			466,506	
		2002	473,506			
		2003	480,606ton		491,748 tons	
		2004	490,000 tons	262,328 ton	528,100 tons	
		2005	524,656			

Goal: ENVIRONMENTAL PROTECTION AND
ENHANCEMENT

Parent Program Strategy: SOLID WASTE DISPOSAL

Department: SOLID WASTE

Service Activity: Landfill

5415000

Service Activity Purpose and Description

The customers who utilize the Cerro Colorado Landfill are City/Private commercial customers.

Solid Waste Management Department has a "State of the Art" Landfill supported by Landfill heavy equipment, environmental monitoring program, preventative maintenance program, computer support for tonnage reports, and air space utilization and landfill staff to assure a safe and efficient operating landfill. The customer conditions at the Cerro Colorado Landfill are constantly being addressed to assure that there is sufficient space to provide for safe containment of solid waste. To support safe containment of solid waste the operating budget is analyzed with landfill staff and Central Services Division.

Changes and Key Initiatives

Experimental vegetation plots will be conducted to give management information on types of vegetation best suited for Cerro Colorado Landfill.

The Convenience Centers have had continued maintenance performed to the facilities to keep them in good operating shape. The Montessa Park Convenience Center is scheduled for a major redesign. Eagle Rock Convenience Center permit was issued December 2002. Traffic Control was changed at Eagle Rock to eliminate the traffic on Eagle Rock Road entering the center.

Building cell #7 to be used starting January 2005 and keep on schedule for a cell every 2 1/2 years.

Continue methane and groundwater monitoring testing at the Cerro Colorado Landfill and South Broadway Landfill to meet State Landfill regulations.

The Disposal Division is using Global Positioning System/ Real Time Kinematic (GPS/RTK) measurements as a management information tool. Volume of dirt to be excavated, establishment of design grades, airspace used and determination of remaining useable airspace are all elements in modern sanitary landfill management. These are to be used to refine and tune our waste disposal cell life cycle of two and one half years. We will open Cell #7 for waste disposal in January 2005. GIS- compatible location on environmental monitoring wells for groundwater and methane gas for all current and historic sites is available.

Experimental vegetation plots on intermediate cover side slopes and tops within existing waste disposal cells will further management knowledge on types of reclamation vegetation best suited for Cerro Colorado Landfill site closure. These plots will also reduce wind erosion and may save operational costs incurred in compliance with mandated cover thickness. Federal resource help in the selection of native seed and the loan of a rangeland seed drill to plant native seeds will be invaluable. The purchase of these drought-resistant and alkaline soil adapted seeds will be from a New Mexico farm.

Waste screening of incoming loads to the Cerro Colorado Landfill continues using written random inspections and visual inspections.

Develop a schedule to replace or lease heavy equipment for the Cerro Colorado Landfill.

A total of 5,636,505 tons of waste has been deposited into the Cerro Colorado Landfill from May 15, 1990 (open date) through June 2003. This is equivalent to approximately 11,526,089 cubic yards of air space. Daily and intermediate soil cover requires approximately 25%, 2,881,522 cubic yards of air space used. With a total of 81,392,000 cubic yards (Cells 1-18), the 11,526,089 cubic yards utilized through June, 2003 represents 14.16% of airspace used.

Input Measure (\$000's)

2002	651	651 REFUSE DISPOSAL OPERATING FUND	2,803
2003	651	651 REFUSE DISPOSAL OPERATING FUND	2,523
2004	651	651 REFUSE DISPOSAL OPERATING FUND	2,479
2005	651	651 REFUSE DISPOSAL OPERATING FUND	2,459

Strategic Accomplishments

FY02: Completed Cell Six

Currently a gas collection system is being installed at the Cerro Colorado Landfill. Once the system is completed by mid-May, the Disposal staff will research "re-newable" options for the collected landfill gas.

Constructed and tested a water recycling system utilizing treated water from the city/county jail for dust control projects and increase compaction at the Cerro Colorado Landfill. Anticipated completion date is mid-March. Water savings is approximately 80,000 gallons per day.

Currently assisting the City of Santa Fe with their collected recyclables. The recyclables are transported by Santa Fe to the Intermediate Processing Facility for processing and marketed. An average of 168 tons are delivered per month.

<i>Output Measures</i>	<i>Year</i>	<i>Projected</i>	<i>Mid-Year</i>	<i>Actual</i>	<i>Notes</i>
# of screens for inappropriate waste performed at landfill (random)	2001			200	
# of screens for inappropriate waste performed at landfill (random)	2002	210			
	2003	210		314	
	2004	230	126	496	
	2005	230			

<i>Output Measures</i>	<i>Year</i>	<i>Projected</i>	<i>Mid-Year</i>	<i>Actual</i>	<i>Notes</i>
Convenience Centers *Relocate old landfill at International Sunport to Cerro Colorado Landfill by private haulers	2001			52,700	
Convenience Centers *Relocate old landfill at International Sunport to Cerro Colorado Landfill by private haulers	2002	53,700		51,305	
Convenience Centers	2003	54,800		54,500	
	2004	55,000	28,764	63,250	
	2005	57,528			

<i>Output Measures</i>	<i>Year</i>	<i>Projected</i>	<i>Mid-Year</i>	<i>Actual</i>	<i>Notes</i>
Ground water monitoring - 8 wells (85 chemical derivative tests are conducted)	2001			once/year	
Ground water monitoring - 8 wells (85 chemical derivative tests are conducted)	2002	once/year		once/year	
	2003	once/year		once/year	
	2004	once/year	10% complete	1	
	2005	once/year			

<i>Output Measures</i>	<i>Year</i>	<i>Projected</i>	<i>Mid-Year</i>	<i>Actual</i>	<i>Notes</i>
Landfill Accounts	2001			132	
Landfill Accounts	2002	132		132	
	2003	132		132	

2004	140	124	133
2005	125		

Output Measures	Year	Projected	Mid-Year	Actual	Notes
Methane Gas Monitoring (South Broadway - 17 permanent wells; Cerro Colorado - 9 temporary wells)	2001			4/year	
Methane Gas Monitoring (South Broadway - 17 permanent wells; Cerro Colorado - 9 temporary wells)	2002	4/year		4/year	
Methane Gas Monitoring (South Broadway - 17 permanent wells; Cerro Colorado - 9 temporary wells)	2003	4/year		4/year	Each well once per quarter
	2004	4	2	4	Each well once per quarter
	2005	4			

Output Measures	Year	Projected	Mid-Year	Actual	Notes
Private Hauler Tonnage	2001			34,743	
Private Hauler Tonnage	2002	35,401		39,365	
	2003	39,700		41,922	
	2004	37,000	20,418	41,100	
	2005	40,800			

Output Measures	Year	Projected	Mid-Year	Actual	Notes
Refuse Collection Residential/Commercial Tonnage	2001			467,933	
Refuse Collection Residential/Commercial Tonnage	2002	477,300		377,563	
Refuse Collection Residential/Commercial Tonnage	2003	480,606		41,922	
	2004	480,606	213,066	423,640	
	2005	425,366			

Quality Measures	Year	Projected	Mid-Year	Actual	Notes
# of Accidents	2001			4	
# of Accidents	2002	4		5	
	2003	1		3	
	2004	5	2	9	
	2005	5			

Quality Measures	Year	Projected	Mid-Year	Actual	Notes
# of Claims/Damages	2001			8	
# of Claims/Damages	2002	8		9	
	2003	8		5	
	2004	10	4	32	
	2005	10			
Quality Measures	Year	Projected	Mid-Year	Actual	Notes
# of Injuries	2001			10	
# of Injuries	2002	10		20	
	2003	10		14	
	2004	10	0	19	
	2005	8			
Quality Measures	Year	Projected	Mid-Year	Actual	Notes
# of Unacceptable waste loads	2001			5	
# of Unacceptable waste loads	2002	4		4	
	2003	4		2	
	2004	4	0	0	
	2005	4			
Quality Measures	Year	Projected	Mid-Year	Actual	Notes
% of Disposal/Processing employees who receive Waste Screen Training	2001			100%	(69 employees)
% of Disposal/Processing employees who receive Waste Screen Training	2002	100%		100%	(69 employees)
	2003	100%		100%	(69 employees)
	2004	100%	90% complete	100% complete	(69 employees)
	2005	100%			
Quality Measures	Year	Projected	Mid-Year	Actual	Notes
% of Unacceptable waste loads	2001			2.5%	

% of Unacceptable waste loads	2002	1.9%		1.9%
	2003	1.9%		.6%
	2004	1.9%	0%	0%
	2005	1.9%		

Quality Measures	Year	Projected	Mid-Year	Actual	Notes
Customer Satisfaction	2001			95%	
Customer Satisfaction	2002	96%		N/A	A customer satisfaction survey was not conducted.
	2003	*N/A		*N/A	*No survey conducted. Survey scheduled for FY04.
	2004	0%	N/A	N/A	No survey conducted, survey to be conducted for FY04
	2005	0%			

Quality Measures	Year	Projected	Mid-Year	Actual	Notes
The public health of the community will benefit through Best Practices of Landfill Management Methodologies. Mandatory certified landfill and Convenience Center Managers MOLO Manager of Landfill Operations Certificate	2001			10certifie	
	2002	10 certifi		11 certifi	
	2003	11 certified		11 certified	
	2004	11 Certified	11 Certified	8 Certified	Current number certified due to retirements, terminations and transfers. This number will increase upon training personnel.
	2005	11 Certified			

Quality Measures	Year	Projected	Mid-Year	Actual	Notes
Utilization of airspace compaction rate by cubic yard	2001			1,000lbs	
Utilization of airspace compaction rate by cubic yard	2002	1,100lbs		1100 lbs	
	2003	1,100 lbs		1,100 lbs	
	2004	1,150lbs	1,100 lbs.	1,100 lbs.	
	2005	1,150lbs			

Goal: ENVIRONMENTAL PROTECTION AND
ENHANCEMENT

Parent Program Strategy: SOLID WASTE DISPOSAL

Department: SOLID WASTE

Service Activity: Old Landfill Remediation

5424000

Service Activity Purpose and Description

The City of Albuquerque over the past eighty years (80) has operated or used over eleven landfills within Bernalillo County, New Mexico. These landfills vary in size, hydro geologic location, length of time used and amount of waste. In addition, many of these landfills were placed in old sand and gravel quarries and arroyos and do not have a protective liner underneath them as required by current EPA regulations. Some are within 50 feet of the underground aquifer used for the City of Albuquerque drinking water supply. Ground water contamination has already been detected from several of these old landfill sites. Methane gas in the explosive range (5%) has also been detected at several of these sites. Property owners are building or wanting to build closer and closer to these sites. In order to protect the public health and the environment, the City of Albuquerque has chosen to be proactive in remediating those sites that are causing problems.

The City of Albuquerque began assessing the most immediate public health and environmental landfill issues. As a result the City began installation of a landfill gas (methane) collection system in 1998 at the old Los Angeles landfill site at a cost of over \$1.3 million. The City is currently in the process of assessing methane gas levels at all of the old City landfill sites and will then propose best practical remediation methods at sites of concern. In addition the City is also currently addressing ground water contamination and methane gas collection levels at and adjacent to the Los Angeles landfill. Ground water contamination has been detected at four former landfills. Offsite sources may be contributing to ground water contamination at two sites. Characterization work is continuing to determine the mechanism and extent of ground water contamination and to assess other potential landfill gas problems.

At this time, the City of Albuquerque has fully characterized only one landfill, the Los Angeles Landfill, and is in the process of remediating landfill gas problems and ground-water contamination at the site. As characterization of landfill gas and leachate contamination is completed at the eight (8) additional landfills, more information will be available.

There is gas-to-energy (renewable energy resource) potential at some sites; cleanup would enhance economic development/opportunities, repair damage to the limited water supply and diminish risk to the public. Sites potentially benefiting from the funding include Sandia Science and Technology Park (Phase 2), Sunport corridor, San Antonio corridor and City View Mobile Home Park (located off of Old Coors Road).

Changes and Key Initiatives

This was a new service activity added mid-year FY/04.

Input Measure (\$000's)

2004	651	651 REFUSE DISPOSAL OPERATING FUND	65
2005	651	651 REFUSE DISPOSAL OPERATING FUND	200

Strategic Accomplishments

Goal: ENVIRONMENTAL PROTECTION AND ENHANCEMENT**Parent Program Strategy: SOLID WASTE DISPOSAL****Department: SOLID WASTE****Service Activity: Convenience Centers****5447000****Service Activity Purpose and Description**

All three Convenience Centers meet the New Mexico State Regulations, providing a facility for citizens of Albuquerque to dispose for their residential trash. The three convenience centers are Montessa Park, located at 3512 Los Picaros Rd. S.E., Don Reservoir, located at 114th ST S.W. and Eagle Rock located at 6301 Eagle Rock Road N.E. which give residents locations to the south, west and north of the city of Albuquerque.

The primary customers are citizens of the city of Albuquerque and small commercial haulers. The customer conditions of the three convenience centers are cleanliness, safety, and operational efficiency. Tractor/trailers, heavy equipment, trucks, containers and personnel staffing support all three convenience centers.

Changes and Key Initiatives

The convenience centers have had continuous maintenance performed to the facilities to keep them in top operating condition.

Waste screening continues to be performed at all convenience centers to alert employees of any hazardous waste in refuse loads. There is also continuous cooperation with Vehicle Maintenance to keep updated records on equipment repairs and costs.

Input Measure (\$000's)

2002	651	651 REFUSE DISPOSAL OPERATING FUND	1,828
2003	651	651 REFUSE DISPOSAL OPERATING FUND	1,883
2004	651	651 REFUSE DISPOSAL OPERATING FUND	1,574
2005	651	651 REFUSE DISPOSAL OPERATING FUND	1,922

Strategic Accomplishments

The Convenience Centers will extend their days of operation to seven days a week.

Output Measures	Year	Projected	Mid-Year	Actual	Notes
# of screens for inappropriate waste performed at Convenience Centers (random)	2001			120	
# of screens for inappropriate waste performed at Convenience Centers (random)	2002	125		240	
	2003	240		*1560	The new permit issued by the State of NM Environment Department now requires that two waste screens must be performed each day at each of the convenience centers.
	2004	280	1,498	2,871	
	2005	2,172			

Output Measures	Year	Projected	Mid-Year	Actual	Notes
Don Reservoir Tonnage	2001			5,019	

Don Reservoir Tonnage	2002	5,100		5466
Don Reservoir Tonnage	2003	5,200		8,494
	2004	7,000	3,213	9,144
	2005	6,426		

Output Measures	Year	Projected	Mid-Year	Actual	Notes
Eagle Rock Tonnage	2001			31,994	
Eagle Rock Tonnage	2002	32,600		33,764	
Eagle Rock Tonnage	2003	33,500		54,499	
	2004	40,000	18,687	39,121	
	2005	37,374			

Output Measures	Year	Projected	Mid-Year	Actual	Notes
Montessa Park Tonnage	2001			15,686	
Montessa Park Tonnage	2002	16,000		12,075	<i>Decrease due to renovation. Closed April 1, 2002.</i>
Montessa Park Tonnage	2003	0		336	<i>Closed, will reopen January of 2003.</i>
	2004	20,000	6,864	14,985	
	2005	13,728			

Quality Measures	Year	Projected	Mid-Year	Actual	Notes
# of Training/Certification Hours	2001			200	
# of Training/Certification Hours	2002	240		200	
	2003	200		200	
	2004	200	120	120	
	2005	240			

Quality Measures	Year	Projected	Mid-Year	Actual	Notes
# of unacceptable loads	2001			5	
# of unacceptable loads	2002	4		4	
	2003	4		3	
	2004	4	9	12	
	2005	33			

<i>Quality Measures</i>	<i>Year</i>	<i>Projected</i>	<i>Mid-Year</i>	<i>Actual</i>	<i>Notes</i>
% of unacceptable loads	2001			4.2%	
% of unacceptable loads	2002	3.2%		1.6%	
	2003	1.6%		.1%	
	2004	1.6%	1%	1%	
	2005	1%			